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- (71) Applicant: UNIVERSITY OF CHICAGO [US/US]; 5640 South Ellis Avenue, Chicago, IL 60637 (US).
- (72) Inventors: HUBERMAN, Eliezer; 1550 North State Parkway, Apt. #LW, Chicago, IL 60610 (US). ZHAO, Yong; 14A Kingery Quarter, Apt. 203, Hinsdale, IL 60521 (US).
- (54) Title: HUMAN STEM CELL MATERIALS AND METHODS
- (57) Abstract: Monocyte derived adult stem cells (MDSCs) isolated from peripheral blood of mammals is provided, along with pharmaceutical compositions containing an MDSC, kits containing a pharmaceutical composition, and methods of preparing, propagating and using MDSCs or differentiated derivatives thereof. The uses of these biological materials include methods of treating disorders or diseases, as well as methods of ameliorating a symptom associated with any such disorder or disease.
- (74) Agents: ZELLER, James, P. et al.; Marshall, Gerstein & Borun LLP, 6300 Sears Tower, 233 South Wacker Drive, Chicago, IL 60606 (US).
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/35538

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 5/00, 02, 08; A61K 35/26, 28

US CL : 435/325, 372, 373; 424/577

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/325, 372, 373; 424/577

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y, P	US 6,534,055 B1 (JUNE et al) 18 March 2003 (18.03.03), see entire document, Abstract in particular.	1-36
Y	US 6,465,247 B1 (WEISSMAN et al) 15 October 2002 (15.10.02), see entire document, Abstract in particular.	1-36
Y	US 6,274,378 B1 (STEINMAN et al) 14 August 2001 (14.08.01), see entire documents, Abstract in particular.	1-36
Y	WO 99/20741 A1 (GERON CORPORATION) 29 April 1999 (29.04.99), see entire document, Abstract in particular.	1-36
Y	WO 99/61584 A1 (THOMAS JEFFERSON UNIVERSITY) 2 December 1999 (02.12.99), see entire document, Abstract in particular.	1-36
Y	WO 01/62895 A2 (XCYTE THERAPIES, INC.) 30 August 2001 (30.08.2001), see entire document, Abstract in particular.	1-36
Y	WO 92/18615 A1 (INDIANA UNIVERSITY FOUNDATION) 29 October 1992 (29.10.92), see entire document.	1-36
Y	WO 93/12805 A1 (REGENTS OF THE UNIVERSITY OF MICHIGAN) 8 July 1993 (08.07.93), see entire document.	1-36
Y	US 5,733,541 A (TAICHMAN et al) 31 March 1998 (31.03.98), see entire document, Abstract in particular.	1-36

☒ Further documents are listed in the continuation of Box C.



See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed

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later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

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23 September 2004 (23.09.2004)

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P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Michail A Belyavskiy

Telephone No. 571-272-1600

INTERNATIONAL SEARCH REPORT

PCT/US03/35538

Continuation of B. FIELDS SEARCHED Item 3:

BIOSIS, CAPLUS, SCISEARCH, MEDLINE, EMBASE, USPATFULL, PCTFULL, WEST

Search terms: Huberman E, Zhao, Y, stem cells, peripheral -blood monocyte, M-CSF, IL-6, LIF, MAC-1, Cd14, Cd34, CD40